Young Worker Safety Certificate Program

OPTIONS PAPER

developed for
the Young Worker Safety Certificate Working Group and
the Workers' Compensation Board of BC

posted online May 2003

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APPENDICES (working documents circulated only to Steering Committee and YWSC Working Group)

APPENDICES to the YWSC Options Paper

NOTE:
The main body of this paper contains all recommendations (in draft form) regarding operating terms of reference for a proposed Young Worker Safety Certificate. The paper also includes evaluation guidelines established by the YWSC Steering Committee for the YWSC Working Group (representatives of 55 stakeholder groups) to use in considering various program models.

The appendices noted below were background working papers for the YWSC Working Group – i.e., used in preparing this options paper but not intended for on-line posting.

1. **EVALUATION CRITERIA – OPERATIONAL DEFINITIONS**
2. **ENVIRONMENTAL SCAN – PROGRAMS REVIEWED**
3. **CASE STUDIES FOR WORKING GROUP – SUMMMARY LIST**
4. **Case Study 1 – ALBERTA – JOB SAFE**
5. **Case Study 2 – AUSTRALIA – WORK SAFE SMART MOVE**
6. **Case Study 3 – CONSTRUCTION SAFETY TRAINING SYSTEM**
7. **Case Study 4 – D.A.R.E. and D.A.R.E. P.L.U.S.**
8. **Case Study 5 – FALLER TRAINING & CERTIFICATION**
9. **Case Study 6 – FOODSAFE**
10. **Case Study 7 – GRADUATED (DRIVER) LICENSING PROGRAM**
11. **Case Study 8 – NEW BRUNSWICK – SAFETY START**
12. **Case Study 9 – NORTHWEST TERRITORIES – WORKPLACE SAFETY: SAFETY AND THE YOUNG WORKER**
13. **Case Study 10 – PASSPORT TO SAFETY**
14. **Case Study 11 – SERVICE!PLUS**
15. **Case Study 12 – TRAFFIC CONTROL PROGRAM**
16. **Case Study 13 – TRANSPORTATION OF DANGEROUS GOODS**
17. **WORKING GROUP FEEDBACK ON PROGRAMS: LIKES & DISLIKES**

OVERVIEW

The design of an effective Young Worker Safety Certificate (YWSC) Program for British Columbia will rely on thinking from many stakeholders: employers, industry associations, educators, labour organizations, safety advocates, youth groups, parent advisory councils, the Workers' Compensation Board of British Columbia, and government representatives. The purpose of this paper is to report on the results of stakeholder collaboration between January and April 2003 as well as earlier research completed in 2001-02. With this paper in hand, participants may go to their constituents and invite comment about what has been discovered and recommended so far.

A Steering Committee representing 20 stakeholder organizations was formed in January 2003. The Steering Committee, in turn, sent members to join other stakeholders in a Working Group (WG) which, between spring and fall 2003, will consider specific program models and recommend the best approach for a certificate program. WG members met in March 2003 to review 13 different certificate program models. In breakout groups they considered specific features of a program model and identified what they liked or didn't like about each approach. Like the Steering Committee in previous discussions, they already had their own ideas about what the program should achieve in B.C. and how success should be tracked.

A draft program model for British Columbia could be constructed from the input provided during the March 12 (2003) meeting of the YWSC Working Group. The draft model is presented in this options paper on pages 11 through 30.
The emergent model will be further refined with additional input from the Working Group as well as from other interested parties, through these steps:

What	*Who*	*When*	*Further supported by*
Review and comment on this options paper	All members of the Working Group	**April-May** 2003	Feedback – including results of online posting – collected by WCB Prevention Division.
All-day workshop to build consensus on the best approach	All members of the Working Group	**June 25**, 2003	
Review and comment on WG recommendations	All members of the Steering Committee	**July-August,** 2003	
Symposium to help fine-tune the program model and to further consider the feasibility of implementing this model in BC	WG and SC members, bringing others from their organization (as well as from other organizations)	**October 8**, 2003	On-line posting of the updated recommendations (will enable other stakeholders to review and comment)
Draft report consolidating WG, SC and Symposium input	WCB staff and project consultants	late **October,** 2003	Adding the results of (a) various youth forums and surveys and (b) cost and feasibility research
Joint meeting to secure agreement on the program design and to consider "next stage" action requirements	Steering Committee and Working Group	**November** 2003 *(final date to be determined)*	

The Workers' Compensation Board of BC, which is funding this stakeholder consultation process, recognizes that some organizations cannot spare staff or volunteers for all-day planning sessions. WCB is relying on Working Group members and others who, like you, have found this discussion paper online, to discuss it within your organization or to circulate it to other interested parties. All written comment is welcome: either by e-mail, fax or postal mail.

OPTIONS CONSIDERED & EVALUATION CRITERIA

During 2001-02, the Workers' Compensation Board of British Columbia researched Young Worker Safety certificate programs in other jurisdictions throughout North America and in other countries. More than thirty agencies were contacted, and twenty-one different program models identified.
Steering Committee members recommended ten additional models to investigate. Project consultants and WCB staff researched these as well and prepared case studies before the Working Group met in March 2003.

Discussion amongst Working Group members has focused on thirteen of these program models.

- Alberta – Job Safe
- Australia – Work Safe Smart Move
- Construction Safety Training System
- D.A.R.E. and D.A.R.E. P.L.U.S. – Drug & Alcohol Resistance Education programs
- Faller Training & Certification
- FoodSafe
- Graduated Licensing Program – Insurance Corporation of BC model
- New Brunswick – Safety Start
- North West Territories – Workplace Safety: Safety and the Young Worker
- Passport to Safety
- Service!Plus
- Traffic Control Program
- Transportation of Dangerous Goods

NOTE: Appendix 3 repeats the foregoing alphabetical list, and Appendices 4-16 describe each program in turn.

This shortlist (above) of the models considered *most relevant* was based on these considerations:

- all *existing certificate programs* that focus on the safety of *young* workers
- *industry-driven* safety programs already in existence in British Columbia that train *all* workers in a site (not solely young workers)
- *behaviourial change* programs designed for youth at risk (whether or not the content is directly related to workplace safety) and for which there *is outcome evaluation* information available.

The Steering Committee provided the Working Group with the following guidelines to bring to the next stage of inspection. What would be the best approach for a Young Worker Safety Certificate program in the province of British Columbia? Working Group members evaluated existing program models against these seven criteria, after developing operational definitions of each criterion..

1. Likelihood of behaviourial change
2. Accessibility for a wide range of youth
3. Relevance to different industry sectors
4. Increased employability for youth who participate
5. Buy-in from all key stakeholder groups
6. Cost-recovery potential
7. Sustainability over the long-term

The results of this evaluation (from March 12, 2003 Working Group meeting) are in the grid on the next page.

Initial Assessment of Program Models Against Steering Committee Criteria

Working Group members reviewed the 13 case studies now in this paper's appendices. They were then able to judge these existing program models against evaluation criteria for a Young Worker Safety Certificate program that were established by the Steering Committee.

Their ratings below – **High (H), Medium (M) or Low (L)** – reveal the relative strengths of the different program models. The **H** code, for example, indicates a program model that is very likely to achieve the desired outcome stated in an evaluation criterion. The **L** code indicates that a program model would likely achieve some success but only very limited success: much less than a program that rated H or M against that criterion.

DK code DK ("don't know") appears in the summary grid where reviewers had too little information to assess whether a given program model would fulfil one of the criteria.

NA code NA (not applicable) appears where the program model under review was not designed to do something that the YWSC program should do. (For example, DARE is a behaviorial-change program that aims to lessen drug use but it is not employment-related. Therefore the group would mark NA against criterion #4: *"Will increase the employability of youth who participate"*)

DM code The group noted **DM ("doesn't meet")** if they had enough information to conclude that this model would NOT meet a particular evaluation criterion set by the YWSC Steering Committee.

PROGRAM	Likelihood of behavioural change?	Accessibility for wide range of youth?	Relevance to different industry sectors?	Increased employability for youth who participate?	Buy-in from all key stakeholder groups?	Cost-recovery potential?	Sustainability over the long term?
Alberta Job Safe	DK	L	H	DK	L	DK	L
Australia Work Safe	DK	L	L	DK	M	NA	H
DARE and DARE PLUS	L-M	H-M	H-M	NA	H-M	DK	H-M
Graduated Licensing in BC	M	H	NA	NA	H	DK	H
NWT Workplace Safety & The YW	DK	L	H	M	M	DK	DK
Passport to Safety	M	H	H	H	H	DK	DK
Transportation of Dangerous Goods	M	L	M	H	M	M	H
Traffic Control Safety	M	DK	L	H	H	DK	M
Group evaluation scores not received for: Construction Safety Training System, Faller Training, FoodSafe, New Brunswick Safety Start, Service!Plus Safety!Plus							

Five breakout groups provided detailed comment did not submit evaluation scores for the program they were reviewing. On the basis of input that was received, however, the following conclusions are made:

- Working Group members want more focus on behaviourial change than they saw in all existing models.
- For reaching a wide range of youth, the approaches rated highest were:
  - Passport to Safety
  - ICBC's Graduated Licensing Program
  - DARE and DARE PLUS models (Drug and Alcohol Resistance Education).
- Models seen as most likely to increase (or sustain) the employability of participants were:
  - Passport to Safety (new national initiative)
  - two industry-specific programs: Transportation of Dangerous Goods (mandatory) and Traffic Control Safety.
- Approaches rated highest re: securing buy-in from all key stakeholders were:
  - ICBC's Graduated Licensing Program
  - DARE and DARE PLUS
  - Traffic Control Safety.
- Most sustainable models over the long term were seen to be:
  - Australia's Work Safe / Smart Move program
  - DARE and DARE PLUS program
  - Transportation of Dangerous Goods program.

Working Group LIKES & DISLIKES Summary

The stakeholder breakout groups who created the grid on the previous page gave further feedback after their study of one or more program models in the March 12 Working Group session. Not only did they state their likes and dislikes, but also they stated how strongly they held these preferences. All of their input was summarized in *Appendix 17*, with specific comments made by the Working Group cross-referenced to the program models profiled in Appendices 4-16.

NOTE: Appendices were developed for Working Group distribution only. Analysis of key themes that emerged in the Working Group's input in March 2003– along with all the more detailed comment from Working Group members – was used to develop the distinctive features of the draft program model for a Young Worker Safety Certificate program in BC that is presented here. The model description begins on page 11.

First – before presentation of that draft model – a section follows now that summarizes all input received so far from *youth* stakeholders.

YOUTH INPUT: Interest & Program Preferences

How WCB is learning what youth think of a Certificate Program

1. WCB's Prevention Services Division hired two research firms to gather feedback from youth on a safety certificate program.
   - In fall 2001, Context Research Ltd. conducted eight focus groups about a number of different WCB Young Worker programs. One group was young workers 15-19 years old and another young workers aged 20-24. Questions about a certificate program were raised to solicit comments.
   - In the late fall of 2002, Ipsos-Reid Corporation conducted five focus group sessions with 21 seriously injured young workers and 3 parent caregivers. A cluster of questions presented to the focus groups probed possible features that a Young Worker Safety Certificate Program might have.
2. There are youth representatives from Student Voice and the BC Federation of Students on the YWSC Steering Committee. The Steering Committee also includes someone injured as a young worker (now in his 30s) who does outreach work with other young people.
3. BC Student Voice, a youth-driven group affiliated with the BC Principals' and Vice-Principals' Association, conducted student forums on Young Worker Health and Safety in eleven regions of the province (June 2002 to March 2003). Their report, prepared for WCB and submitted in March 2003, summarizes the views of 450 students in Grades 8-12.
4. Further surveys of youth – conducted by WCB throughout 2003 – will gather input from hundreds of other young people. Initial results will be available to the YWSC Working Group in August.

What has been learned so far from youth stakeholders

1. Perceived Value

Young workers, supervisors, and educators all thought a certificate program could have real value. They saw it as a resume-builder that could increase young workers' employability, but only if it was valued by industry. Without that link to labour market advantage, youth expressed little interest in taking a certificate program.

Injured young workers observed that there is little sex appeal in the certificate program: to young people, it will suggest another hurdle on the path to the work world. They held that this perception, combined with the effort of participating in a new program, can be expected to dampen enthusiasm.

Injured young workers still expressed interest in helping create a Young Worker Safety Certificate Program. They were ready to recommend a well crafted program to others in the following terms:

- You'd get a job before others would. It has definite resume benefits.
- You may have your probationary period reduced if you have done this.
- It's free!
- You can use it as a credit towards your high school diploma.
- You can do it on your own time at home online.
- It's going to be mandatory later on, so it's best to do it now.
- You'll feel so much more comfortable walking in on your first day.
- It's more than common sense; it's about saving your life.
- It's an investment in your future.

2. Perceived Need

BC Student Voice reported five themes from the student forums, two of which are relevant to the proposed Young Worker Safety Certificate Program: a widespread lack of understanding and knowledge about workplace safety, and secondly, a lack of proper training and safety procedures.

In the regional forums facilitated by Student Voice, students advocated the creation of a universally accepted safety training program for young workers – including a mandatory one- to two-week training period in which the young worker is shadowing (and under the close supervision of) an experienced worker.

Students throughout the province noted that "just putting more programs in the school system will not solve the problem." A new education program – one that involves schools, but also involves community and workplace-based training for young workers as well as large multimedia information campaigns that travel to all schools in the province – is advocated. The new program should offer training "outside school that can be taken voluntarily or in which employers can request that their young workers participate." In students' view, this new program should be driven as much by employers as by educators – and the training needs to be "more comprehensive and more specific" than current safety programs taught in the public schools.

3. Pricing

Young workers said the program should be mandatory in schools, possibly because they felt that if young workers really are important enough to protect with extra instruction, the program should be free and provided to everyone in the age group.

Of all groups surveyed – including parents, for instance – young workers appear to be the least willing to pay for a Young Worker Safety course. ("School curriculum is a right rather than a responsibility – why should workplace safety training be different?") In their experience, if it's so important, then it should be mandatory and free. Also at play here may be the general perception amongst 15- to 19-year olds that the topic of workplace safety is boring, not being applicable to them because they won't get injured. The turn-off for 20- to 24-year olds would be different: they may consider themselves experienced workers who no longer require basic safety training.

However, both groups implied they would be interested in the certificate program if there was a clear demand for it by employers, or if some employers made it mandatory. If such were the case, the attitude toward fee-paying might well change.

4. Delivery

Young people preferred a classroom model, with an online course available as a fallback for anyone who could not attend a class. Injured young workers thought that having the certificate program online would be motivational; it would entice young workers to complete the program. Those doing so should expect, they thought, to take a final test or exam in the presence of a supervisor and to show photo ID when doing so.

If taught in school, the preference was for a course taught over multiple sessions. Outside of school the preference was for a one-day course.

5. Content

Focus group members who had already been in the workplace and had been injured were, predictably, the only young persons who offered views about what should be taught in the certificate program. Injured young workers comment that industries and types of jobs within industries vary dramatically. They felt that to be effective, this program would have to be segmented into several streams to cover the level of detail required. Otherwise, certification would be meaningless. Thus, program developers should consider a core set of topics to be covered by all program participants, and be prepared to offer specific streams of interest for young workers as well.

Further research planned

WCB will survey hundreds of young people (primarily in April and May 2003) through student conferences, workplaces and industry events such as Skills Canada to learn:

- If they think that more training will help prevent injuries.
- What would motivate them to spend time in a work safety course.
- Whether or not they would be willing to take a no-fee course or – if a fee were charged –
- How much they, or their family, would be willing to pay.
- If they would want to do a course in the classroom only or in a classroom along with other ways such as on-line, entirely on-line, or through a community organization or other agency.
- What they would want to learn in a safety course.
- If they would be more likely or less likely to attend if the hours of instruction added up to two or even three full days, and whether they would prefer hours to be clustered or spread out (maybe for several weeks).

Data will be interpreted in the light of responses to other survey questions that reveal:

- Whether or not the person answering is already working, and if so, in what industry
- The regional location of the person answering
- How much safety training a young workers has already had
- The age and gender of respondents.

DRAFT MODEL: Recommended Design Features

The draft program description that follows is based on input from Working Group and Steering Committee members and the youth input received as of April 2003. Preferences have been pulled out in as explicit and specific terms as possible.

Some reviewers may not recognize all these features as recommendations of the Working Group as a whole. Quite so. Some of the recommendations were put forth by one or some (but not all) breakout groups at the March 2003 meeting of the Working Group, and there has not yet been an opportunity for consensus check on those recommendations.

That's what this options paper is for: to give all stakeholders a chance to indicate whether you support the emergent model described here – and if not, to specify how it needs to be altered to secure your support.

In creating the draft program model for British Columbia that appears here, the YWSC project consultants have used the full report of findings from the environmental scan (2001-02), the results of focus groups in 2001 with young workers and in 2002 with injured young workers, the results of other youth surveys (2001-02), Steering Committee input (January-February 2003) and Working Group input (March 2003).

PLEASE NOTE that Feature #12 (Legislative Support) was not explicitly identified in March by any one breakout group as a desired feature of the model, but has been inferred by the project consultants as a desired feature (based on discussions amongst Steering Committee members). The purpose in including it here is to surface assumptions of Working Group members about whether legislative "teeth" are needed in the YWSC program and if so, what kind.

VISION

- An industry-endorsed and largely industry-financed program that is administered by a community-based not-for-profit organization
- Reaching students, school dropouts and all young job seekers as well as youth who are already in the workplace
- Delivering safety training through multiple channels: secondary and post-secondary schools, the Internet, and one or more community agencies or industry associations and organized labour
- Changing the consciousness, skill level and behaviour of young workers in ways that lead to significant and sustained drops in the frequency and severity of young worker injuries

Feature 1 VOLUNTARY vs. MANDATORY PROGRAM

- Program participation will not be required of any young person. The Young Worker Safety Certificate program will not be mandatory for secondary school graduation. Nor will the YWSC be made a condition of employment.

- Incentives for participation – e..g., earning credits towards high school graduation, qualifying for a work experience placement, earning a higher wage by becoming safety certified, reducing probationary time, etc. – will be part of the program model so as to encourage involvement by a high number and a broad mix of youth.
  (See subhead #11 in this section for more detail on specific incentives recommended.)

NOTE:

- Although initial keenness about legislative support for the FoodSafe program was expressed and some Working Group members also liked the mandatory aspect of the Transportation of Dangerous Goods program model, stakeholders decided after further discussion that this was *not* a feature to embed in a Young Worker Safety Certificate (YWSC) program.

  Participation should not be "demanded." Youth tend to perceive a mandatory program as simply a "hoop to jump through" and making the program mandatory is likely to lessen learner involvement with the course content. A mandatory program diminishes the value of the certificate in holders' eyes and employers' eyes. Neither federal or provincial government should be able to prevent you from working / earning a livelihood unless you are the holder of a safety certificate. What program sponsors and administrators need to do is encourage young people to take the responsibility themselves for their well being on the job and to voluntarily acquire the necessary knowledge and skills to keep themselves safe and healthy.

- A voluntary approach is seen by Steering Committee members as empowering youth to make choices. As more than one person put it, "desire will change behaviour – not regulation."

Feature 2 TARGET AUDIENCE DEFINITION

- 15-24 year olds (males and females)

- Current *and* prospective workers in this age group, including:
  - New / recent hires of BC employers
  - Secondary school students in BC (whether working now or not)
  - Targeted outreach to school dropouts
  - Targeted outreach to recent immigrants

- Primary target = *males* in this age group because they remain at higher risk of workplace injuries, both in terms of frequency and severity of injuries (but target group to also include female youth)

- Phase I target = young people interested in or already working in those industry sectors that currently have the highest rate of workplace injuries in this age group

NOTE:

- Learning objectives and content are to be applicable to *all new workers* regardless of age.
- However, delivery strategy and packaging of content must be tailored to a young audience – because the interests, learning styles and motivations of youth are different than those of older adults, and because this program is a strategic initiative to reduce the high number of injuries that occur amongst young workers and most commonly within their first six months on the job.
- Later adaptations of delivery strategy for older audiences are to be considered – subject to confirmation of need, market demand and partnership interest in financing and administering such program variations.
- **Some Working Group members have recommended a change in the target audience: increase age target to 29 years (i.e., target 15-29 yr. olds).** The rationale for this recommendation is not clear, so advocates of this definition of the target audience are asked to provide further input.

Feature 3 LEARNING OBJECTIVES

- **Objective #1:**
  Increased awareness of health and safety issues in the workplace

- **Objective #2:**
  Acquisition of essential safety-related knowledge:
  - nature of workplace hazards
  - how to identify workplace hazards
  - practices to ensure safety in the workplace and reduce injury risk

- **Objective #3:**
  Development of positive attitudes toward health and safety

- **Objective #4:**
  Integration of skills (hazard recognition and risk management) into day-to-day behaviour, especially in the workplace.

NOTE:

- Consensus has emerged across both the Steering Committee and Working Group that *awareness* of health and safety issues is, on its own, an insufficient goal. The Young Worker Safety Certificate program should result in attitudinal and behavioural changes as well as acquisition of knowledge about safe work practices.
- More specific learning objectives will need to be developed for each module in the YWSC curriculum. (Next phase of program development, following agreement on conceptual model and other operating terms of reference for a safety certificate program for young workers)

Feature 4 CONTENT and MODULAR CURRICULUM DESIGN

- Though delivery will be tailored to youth, the program content will be applicable to *all* workers – not just *young* workers, not just *new* workers.

- The Young Worker Safety Certificate program will include a "foundation (core) module" that covers essential knowledge and skills related to safety in a variety of industry settings. This module will be required content for all YWSC candidates to master.

- In addition to the "core" module (or modules), all program participants will complete at least one other module that covers *industry-specific* hazards and safety practices.

- The Young Worker Safety Certificate program will build on the British Columbia's Student WorkSafe K-9 curriculum – and will replace the existing Student WorkSafe program for Grades 10-12 (or alternatively, for Grades 11-12).

  Rationale:
  - Secondary school students have (through regional student forums hosted by Student Voice) identified the need to replace the existing Student WorkSafe program with one that is more universally supported by industry, that attracts and involves more youth, and that provides *more effective* safety training.
  - Focus groups with youth, parents and educators also noted that the existing Student WorkSafe program (usually delivered as part of CAPP, the Career & Personal Planning Program developed for secondary schools) is not viewed very positively by most youth.
  - Secondary school educators have (through focus groups, surveys and involvement on the YWSC Steering Committee) noted discomfort about their own capacity and effectiveness in providing workplace safety training, given that their own work experience does not (for the most part) extend into other industry settings.
  - Budgetary cutbacks in BC's public school system have also reduced support and the necessary instructional and administrative resources for career preparation programs – making it increasingly important under current conditions to adopt a delivery model for the YW Safety Certificate program that is not solely reliant on secondary school teachers. Enhancing the curriculum at the same time as the delivery model is a logical move.
  - Graduation requirements for secondary school students are changing in British Columbia and WorkSafe programming will need to be aligned with those changes.
  - Input from YWSC Steering Committee and Working Group members regarding content suggests a program longer than 3-5 hours total – especially given the program focus on behaviourial change and development of competencies, not just awareness of hazards. And educators and administrators have communicated to WCB that it is unrealistic for secondary schools to teach an optional WorkSafe program if the course is any longer than 3-5 hours, including testing time.

- The majority of learning objectives and topics covered now in the Student WorkSafe Grades 10-12 curriculum – for example, consequences of unsafe work practices, hazard recognition, understanding rights and responsibilities (of employer and employee), WHMIS (Workplace Hazardous Materials Information System), back care – will form the basis of the YWSC "core module" but additional content will also be added to satisfy employers' needs and youth interests.

- Some of the topics covered now in the Student WorkSafe Grades 10-12 curriculum – e.g., specific hazards in different occupations and industry settings as well as personal protective equipment – will (along with additional new content) be covered in industry-specific modules.

- The YWSC program will also differ from the Student WorkSafe program in that it will include a standardized assessment of the learner's knowledge and skill.

CONTENT PLAN:						
START with:	**ADD:**	**CREATE:**	**ADD:**	**ADD:**	**ADD:**	**ADD:**
Grade 10-12 Student WorkSafe content	New "core" content	Refresher module for learners who have already completed Student WorkSafe program	Industry-specific modules	Skill practice components to each content block	Test on core content	Tests on industry-specific content
ALSO: Adapt as *on-line* learning resources						

- In Phase I, the elective modules (choice of industry-specific modules for the learner) will reflect the industries with the highest injury rate and claims cost for young workers in British Columbia.

- In later phases, other industry-specific modules will be added to the YWSC program – as injury claim patterns change and/or as industry associations or corporate sponsors provide funding for curriculum development and competency assessments that are specific to their industry.

- Content for the core module will include:
    - WHMIS (Workplace Hazardous Materials Information System)
    - Employer and employee rights and responsibilities
    - Hazard anticipation & identification of all the ways in which workers can be injured
    - Risk management practices
    - Communication skills and assertiveness training
    - Employee fitness factors (lifestyle, nutrition, exercise).

- Content for the industry-specific modules will include:
    - Specific hazards within that industry setting / occupational grouping
    - Personal protective equipment
    - Safe work practices (related to industry-specific hazards)
    - Handling violence in the workplace (for those sectors in which this is an issue)
    - Traffic safety (for all fields in which young workers are transporting information or other goods by bicycle or motor vehicle).

NOTE:

- Detailed curriculum analysis and development will be done in 2004, once stakeholder agreement has been secured on the overall program model to adopt for a Young Worker Safety Certificate program in British Columbia.

  It is during this later stage – which will be stage 4 of program development, following focus groups and other initial research (stage 1), the environmental scan (stage 2), and options analysis (stage 3) – that learning objectives for each *module* within the program will be developed as part of the curriculum plan.

Feature 5 INSTRUCTIONAL DELIVERY APPROACH

- Secondary school teachers and program coordinators should have the option of delivering the certificate course modules as a stand-alone course or integrated with other material.

- YWSC training should also be delivered extensively outside the public school system: with youth voluntarily paying a fee to take the training in a community setting and/or employers paying for their young workers to participate.

- Learning resources for youth should be available *on-line*.

- Instructional materials for secondary school teachers and other educators and safety coaches should also be available on-line. Whereas promotional information about the Young Worker Safety Certificate program would be on a public site, materials for instructors may be on a password-protected site – and may be available only for a fee.

- The instructional delivery plan must give greatest emphasis to interactive sessions involving teachers/trainers and learners together – rather than reliance primarily on self-directed studies. On-line resources are to broaden access and facilitate learning but will not be the primary means of safety training in the YWSC program. Hands-on training will be the focus.

- All YWSC instructors will receive a Train-the-Trainer orientation and will be certified through the organization that manages the Young Worker Safety Certificate program.
  (See the diagram on the next page and also page 23 for more detail.)

- Once the essential content has been clearly identified, program providers must package it in a highly-interactive form that is geared specifically to a youthful audience.

- Youth must have input into the design of the learning resources.

- Videos that show real-life situations should be part of the learning resource kit for the program, as should multi-media presentations.

- All modules of the YWSC course must have a practical skill-building and skill practice component that reflects real-life situations. Examples include experiential assignments (e.g., that require the learner to visit a workplace and identify any hazards), role-plays, and other group work that will strengthen learners' communication skills, confidence, and other practice skills including how to deal with conflict with supervisors or co-workers when in a hazardous situation.

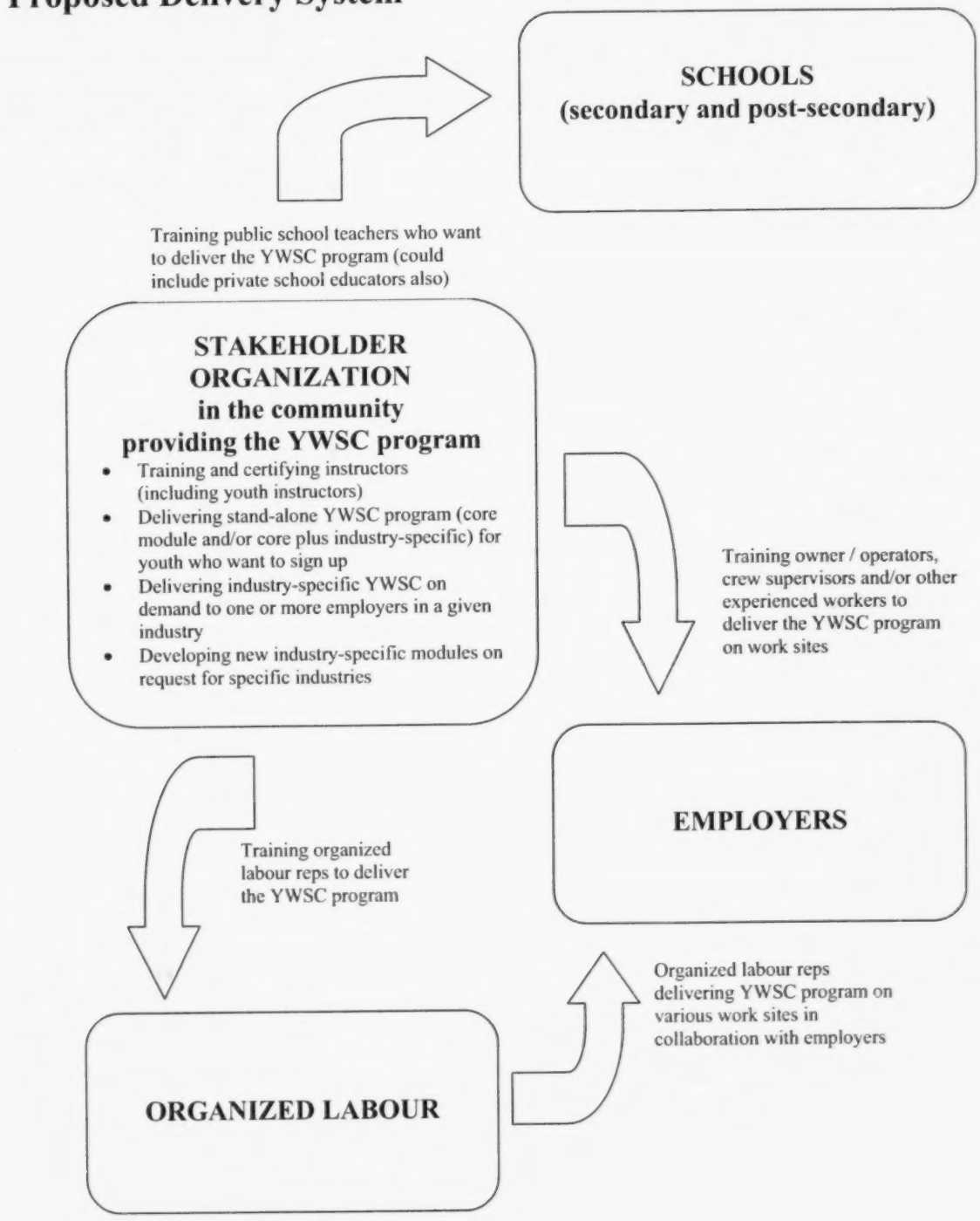
- Program participants should receive (or be able to download) a pocket-sized reference guide that they can use as an ongoing on-the-job aid.

- Learning resources for parents, employers and unions – to increase their awareness of workplace hazards and to help them communicate and contract with youth about safety practices – must also be produced. On-line delivery should be the primary means of distributing this support.

NOTE:

- One-on-one instruction is seen as the best way to ensure acquisition of safety skills. However, Working Group members see this approach as too labour-intensive to be cost-effective, especially given the desired reach of the program.

Proposed Delivery System


SCHOOLS
(secondary and post-secondary)
Training public school teachers who want to deliver the YWSC program (could include private school educators also)
STAKEHOLDER ORGANIZATION in the community providing the YWSC program
• Training and certifying instructors (including youth instructors)
• Delivering stand-alone YWSC program (core module and/or core plus industry-specific) for youth who want to sign up
• Delivering industry-specific YWSC on demand to one or more employers in a given industry
• Developing new industry-specific modules on request for specific industries
Training owner / operators, crew supervisors and/or other experienced workers to deliver the YWSC program on work sites
EMPLOYERS
Training organized labour reps to deliver the YWSC program
Organized labour reps delivering YWSC program on various work sites in collaboration with employers
ORGANIZED LABOUR

Feature 6 INTERACTIVITY COMPONENT for learners

- **See—Think—Do approach** Continue to use the instructional approach that has shaped the Workers' Compensation Board of BC *Student WorkSafe* program, the safety module in the *Service!Plus*, and also the Insurance Corporation of BC's *Graduated (Driver) Licensing Program*.
  - *See the hazards:* use specific examples, common symbols, other visual aids and simulation activities to raise awareness.
  - *Think about* the risks, the action options, the potential consequences: introduce critical knowledge to deepen understanding.
  - *Practice what to do in this situation:* develop required competencies in program participants by having them handle a hazardous situation, e.g., through role play, workplace-based assignment, or case study exercise.

- **Coaching support** To increase program validity, incorporate opportunities for young people to practice essential skills while under the observation of a certified instructor.

- **Feedback loop (could be automated)** Embed a feedback mechanism into self-assessment exercises and/or other forms of competency assessment, so that each program participant learns what s/he did right and also what s/he did wrong – and can get this information without having to make special requests.

Feature 7 ASSESSMENT

- Certification requirements should include **satisfactory demonstration of *all* critical foundation knowledge and skills for workplace safety – and not just some of those competencies**.

  The testing system should not certify a learner who gets an overall grade of, say, 70% by scoring 95% in one module and a score of only 45% in another equally important competency area. In other words, a test that allows a program participant to be certified on the basis of a certain error threshold *without confirmation that he or she has acquired all essential skills* is *not* acceptable.

- **The passing score required for safety certification (for employment purposes) must be high.** It must be much more than 50%. Even 75% is too low a threshold score for certification – especially given the intended focus on the most high-risk industries in developing industry-specific course modules. As noted in the first bullet, the high score requirement must apply to *all* critical knowledge and skills – and not just be a high average.

- **The test must be competency-based:** it must assess more than awareness, more than knowledge. The YWSC assessment must test youth's skill in handling hazardous situations.

- Stakeholders will support a system in which students are **able to earn high school credits by completing the course and earning a grade of 50% or higher** (e.g., one credit towards graduation requirements) – **but only if** learners will not be registered as "safety certified" for employment purposes unless they achieve a much higher grade, e.g., 90-100%.

- **For those who take the program but then fail the competency assessment, there should be no *dis*incentive – especially a fiscal disincentive – to continuing to learn.** These learners should be able to review their mistakes and take the test again – possibly take the course again too – without having to pay a further registration or test fee.

- If on-line assessments are used (solely or as one option for learners), the learner must be required to **complete the assessment in a setting supervised by an accredited YWSC instructor or tester**. This could be a school, a workplace or a community agency.

- **Certificates should be dated – and should also have photo identification on them.**

- **An automated registry of all certificate-holders will be maintained and available 7/24 to employers via the Internet.**

- **The on-line database available to employers, youth, and other stakeholders will also include all program providers and employers supporting the registry.**

NOTE:

- The agenda for the June 25, 2003 meeting of the Working Group will include more discussion of the *nature* of assessment needed for the YWSC program.
- There are several other aspects of the assessment system that need further discussion. Besides the type of assessment that should be adopted (the *What* aspect of test considerations), further input is also needed about the *Who—How—Where* of testing? In other words, under what conditions should testing occur? And what should that test be like?

  Also, to whom (and how) should test results be reported?

  And who should be responsible for certificate issue and renewal? How should that system work?

Feature 8 PROGRAM LENGTH

- If course modules are delivered sequentially *without* a time interval between program modules, then the course duration should be no more than two days.

- Whether delivered all at once or over several weeks, approximately twelve (12) hours should be the maximum instructional time needed to deliver the Young Worker Safety Certificate course.

- Optional learning activities (in workplaces, in other community settings and/or through independent study) may be part of the package of learning resources that are provided to youth, employers and unions, parents and YWSC instructors.

- In addition to the time needed to cover essential safety course content, a one- to two-week mandatory on-the-job safety training period should be required for all new young workers. The new hire would shadow a supervisor or another employee until they have seen *all* aspects of the job they will be doing and have had time to build rapport and to gain both the opportunity and the confidence to ask questions about how to do tasks properly – *and safely*.

  (NOTE: This is a program term advocated by secondary students who participated in the regional forums led by BC Student Voice, June 2002 – March 2003.)

NOTE:

- The topic of program length will require further discussion/deliberation as the program design is fine-tuned. In particular, **stakeholders need to clarify whether they see two days as the maximum time to complete the *core* module of a YW Safety Certificate program – or whether two days must be viewed as the maximum time required to complete all of the core content as well as industry-specific modules**.
- As noted earlier, the WCB will also be surveying hundreds of youth to obtain input to the certificate program. The survey includes a question about tolerance for various course lengths and youth views on best scheduling (e.g., evening or weekend instruction vs. all-day workshops). Survey findings will be available to the Working Group in August 2003.

Feature 9 HOST ORGANIZATION

- The program should be not be administered by the Workers' Compensation Board. Rather, it should be managed by an existing stakeholder organization that is arm's length from the WCB.

- The host organization should operate the Young Worker Safety Certificate program on a not-for-profit basis, using surplus revenues from YWSC operations for ongoing enhancement of the program and/or subsidy of course and test fees for low-income youth.

NOTE:

- Alternatively, a new agency could be formed – with industry financing and potentially with some start-up funding assistance from WCB – to administer the program on behalf of employers and workers in multiple industries. Input on the best way to go (and why) is invited.

Feature 10 INSTRUCTOR REQUIREMENTS

- YWSC course modules will be delivered through certified instructors who are recruited and oriented by the organization responsible for managing the Young Worker Safety Certificate program in British Columbia.

- Secondary schools will be a key venue for the certificate program, but instruction will also be available through pre-employment and industry training programs, community and employment centres, to provide coaching / mentoring support to youth who may (or may not) also be taking advantage of on-line learning resources.

- The program must have a large pool of instructors – and it should be a diverse group. YWSC instructors should be a multicultural group, including both male and female instructors, people with work experience in a range of industry settings, and ideally also some instructors who can deliver the course not only in English but in other languages as well.

- Youth will be actively recruited and encouraged to qualify as YWSC instructors so that the instructional pool includes peer presenters.

- Employers and organized labour reps can qualify as YWSC instructors for the purpose of delivering the program to youth in specific workplaces.

- Clear selection procedures and criteria for "trainers / mentors / coaches" must be established, and should conform to national minimum standards. All instructors should be certified through the host organization that provides overall administration of the YWSC in British Columbia.

- The program operating budget must include training for program instructors. Stakeholders view such a train-the-trainer component as "expensive" but "good."

NOTE:

- Working Group members like models in which more experienced workers mentor young or other new workers, but are also concerned about the risk that older workers may cut some corners and pass on their mistakes as well as their knowledge. Screening of instructors and providing standardized train-the-trainer support to all YWSC instructors would mitigate this risk.
- Secondary school students recommended (through regional forums led by Student Voice) more use of peer presenters for safety training – including more presentations by injured workers and placing more emphasis on recruiting female as well as male presenters and also workers who have suffered an injury which is not necessarily very visible but which nonetheless has had major consequences for them.
- **Criteria for certifying instructors will need to be developed – and then circulated to the YWSC Working Group for later review and comment. Passport to Safety, Service!Plus and other training providers are invited to submit instructor criteria that have already been developed by their organizations.** WCB uses the following guidelines in approving applications from individuals and organizations interested in becoming part of the WorkSafe Education Network:

  Every instructor delivering WorkSafe courses in this organization should meet the following WorkSafe Instructor Criteria:
  - A minimum of three years' work experience, which includes a minimum of:
  - One year in occupational safety, hygiene, or ergonomics (*e.g.*, as a safety coordinator, hygiene officer), *AND*
  - One year of specific experience relevant to the subject matter of the course (*e.g.*, supervisory or safety committee experience and expertise in lockout, musculoskeletal injury prevention, or workplace violence prevention)
  - A minimum of one year's experience as a trainer, which includes at least three months as a health and safety trainer
  - A minimum of having:
    - Completed the Element of Instruction course within the BC Provincial Instructor Diploma Program, *OR*
    - Completed an equivalent course, *OR*
    - Acquired experience with demonstrable equivalent knowledge, skills, and abilities
  - Must not engage in conduct that is criminal in nature and may make the individual unfit to deliver any WorkSafe courses (*e.g.*, convictions involving bodily harm, sexual assault, other violence or invasion of any person).

Feature 11 PARTICIPATION INCENTIVES / BENEFITS

- For secondary students (either as part of the Secondary School Apprenticeship program or other practicums) and also for youth in post-secondary programs, work experience placements should be contingent on candidates first acquiring a Young Worker Safety Certificate.

- Completion of an *industry-specific* module on workplace safety training should be an elective course option for all students in either Grade 11 or 12 – with the content tailored to the Pathway Concentration Areas proposed by the Ministry of Education for all secondary school students: Business & Marketing, Sciences & Ar ed Science; Social Science & Human Services: Fine Arts; Trades & Technology; Sport, Fitness & Recreation; Hospitality & Tourism; and the Humanities.

NEWS UPDATE:

On April 23, 2003, the BC Ministry of Education announced the new graduation requirements for secondary school students. Students will be encouraged but now not required to choose a "focus" for their studies. Their focus can also change between Grades 10-11-12. The more specific proposal that students choose a Pathway Concentration Area (as noted above) has been withdrawn.

PROPOSED AMENDMENT TO THIS ELEMENT OF THE YWSC PROGRAM DESIGN:

Completion of an *industry-specific* module on workplace safety training should be an elective course option for all students in Grades 11-12.

As noted earlier in discussion of Phase 1 under *Target Audience Definition* (p. 13) and also under *Content and Modular Curriculum Design* (p. 16), the first industry-specific modules to be developed should reflect safety requirements in those industry sectors that have the highest rate of young worker injuries. In determining those sectors, both frequency and severity of injuries should be considered.

- Secondary school students who complete the Young Worker Safety Certificate program should earn one or more credits toward their high school graduation portfolio. (Under the new graduation requirements, this portfolio requirement will be a collection of students' work or records of achievement in six areas, one of those areas being employability skills.)

- Additional tangible benefits must be offered by employers to motivate many young people to take the Young Worker Safety Certification program. Provided they meet certification requirements (including the higher score required for certification with employers vs. high school credits), each YWSC graduate should earn one or more of the following benefits from an employer who is a registered sponsor / supporter of the YWSC program:
  - an interview as a prospective job candidate
  - if a new hire, a reduction in the length of probationary period
  - modest wage increase – or minimum wage as starting wage instead of training wage.

NOTE:

- **More input is needed from stakeholders re: the proposed prerequisite for Work Experience placements for secondary school (and post-secondary) students: should it be completion of the core module of the YWSC program OR completion of the full program (core plus an industry-specific module)?**
- The WCB youth surveys (April-May 2003) include a question about what would motivate respondents to complete a YWSC program. Survey findings will be available to the Working Group in August.
- The June 25, 2003 meeting of the Working Group will include more discussion of the nature of participation incentives to be offered and by whom.

Feature 12 LEGISLATIVE SUPPORT FOR PROGRAM

- Current and prospective workers must be able to earn some tangible benefit by satisfactorily completing program requirements and earning their work safety certificate.

  Youth input through the Steering Committee has revealed a strong interest in a fiscal incentive: specifically, the **ability to move from a training wage ($6 per hour) to minimum wage ($8 per hour)** – provided they can demonstrate, through an industry-endorsed safety certificate program, the ability to work in a safe manner and minimize the risk of injury to themselves or others.

  While this should not be the only participation benefit offered to youth, the wage incentive should be one of the incentives offered – and it should be available to youth regardless of the region in which they work.

- **Rationale:** Embedding this incentive in a new statutory regulation would increase the number of employers providing the benefit and therefore, in turn, increase the number of youth willing to invest in taking the safety certificate program. Hence the reason for proposing legislative support of this nature for a Young Worker Safety Certification wage incentive.
  - The conditions for payment of training and minimum wages are statutory requirements.
  - The cost saving to an employer in paying a training wage (rather than minimum wage) to a new hire is a short-term saving (maximum 500 hours: the equivalent of about 3 months full-time employment for each new hire).
  - On the other hand, the cost implications to an employer of worker injuries are long-term because workplace incidents that lead to injuries affect employer assessments that must be paid every year to the Workers' Compensation Board.
  - If the potential assessment reduction (from a lower injury rate) is greater than the short-term cost to an employer of lessening the period that a new hire can be paid a training wage (instead of the $2-higher minimum wage), then there would be a compelling reason for employers to support the incentive proposed.

- **Subject to** further research findings that indicate youth prefer *different* incentives (and/or evidence that employers and industry associations will actively oppose the wage incentive), it is recommended that all participants who satisfactorily complete the YWSC competency assessment be entitled to minimum wage from their employer.

NOTE:

- Should the minimum-wage entitlement be as soon as a young worker is safety-certified? Or within what period: how much sooner than the 500-hour interval over which the training wage now applies to new workers? More input is needed from stakeholders on this aspect of the wage incentive proposal.

Feature 13 PRICING

- The *maximum* fee that a youth must pay to complete a course and test for a Young Worker Safety Certificate should be $50.

- Secondary school teachers who are able to incorporate the YWSC curriculum into existing programs and who become certified YWSC instructors should be able to offer the certificate program at a discounted price to their students, as an incentive for those students to complete the safety certification before high school graduation.

  The program pricing model adopted by the organization responsible for overall administration of the YWSC program in British Columbia should incorporate this incentive-pricing for secondary school teachers and their students.

- For youth not in school, corporations should also provide and promote some bursaries to ensure access to the program is not denied to those with low incomes. *(See next subhead for more detail on financing proposal)*

NOTE:

- The on-line program model used by Australia is liked because of how inexpensive it is. Internet-based delivery of information is also highly valued because it provides program participants with 7/24 access to learning materials. However, Working Group members examining this program model do not want a BC program to rely on *self*-assessment and in particular, on unsupervised assessment. They also question the reliability of multiple choice tests and would like to see more emphasis placed on 3rd party verification of a learner's competency. These assessment considerations will put upward pressure on operating costs for the YWSC in British Columbia.
- The YWSC Working Group, Steering Committee and other stakeholders perceive a clear link between program fees and accessibility. Many like the idea of a no-fee program for its universal accessibility. Others, however, see a fee as necessary not only to sustain operations but also as a means for giving the program inherent value. Generally, fees in excess of $50 are seen as a barrier to access and take-up.
- A discounted price charged by secondary schools might be no more than the actual per-participant cost of the learning resources (e.g., workbooks, job aids) provided to youth – or it could be somewhat more, e.g., to recover specialized teacher training costs. Further input from Working Group members and other stakeholders (in particular, from educators) is needed regarding an acceptable pricing model.
- More stakeholder input is also needed regarding *who* (only secondary school teachers / program coordinators?) should be eligible for a price discount.
- **Working Group members also need to clarify whether they see the $50 fee as the maximum charge for the *core* module of the YWSC program (with an additional charge possible for industry-specific modules) – or whether $50 is seen as the maximum price that can be charged for the core and industry-specific modules combined.**
- Additional research is required to better inform the issue of program costs and funding options, and will be completed over the next months. The WCB youth surveys (April-May 2003) include a question about tolerance for various fee levels.

Feature 14 FINANCING

- Reliance on government funding for implementation of the program should be avoided. Public schools should not be expected to have sufficient resources for curriculum development or to buy instructional materials or other learning resources for program participants.

- Funding to develop and administer a Young Worker Safety Certificate Program focused on core safety competencies that apply to *multiple* industries (i.e., foundation skills for young workers, regardless of the occupation they choose) should come from motivated employers / industry.

- Development of industry-specific training modules for the program *must* be financed by industry.

- The program reach should be sufficiently great that the program can operate on a cost-recovery model – at least beyond its start-up and pilot phase.

- Extensive promotional activities to secure the necessary participation level (and to break-even without exceeding the participant fee ceiling of $50 noted earlier) must be included in the operating plan and program budget.

- If not for the whole program (including curriculum development, certification registration system, program promotion and administration), then full cost-recovery operation should be the aim at least for (a) instructional delivery and (b) assessment operations, i.e., course and test services.

- The operational model should also include provision of student bursaries for youth in financial need. This bursary component should be funded by corporations – either by:
  (a) building provision for some no-fee seats into the break-even model when determining overall costs and industry contributions, or
  (b) encouraging corporations to initiate their own sponsorship programs as part of their community outreach.

Feature 15 EVALUATION APPROACH

- Benchmarks must be set at the outset of the program – and program success then regularly evaluated against frequency and severity trend analysis for injuries incurred by young workers. Evaluation costs should be included when calculating the operating cost of the program and establishing delivery arrangements.

- **Evidence of a reduction in the YW injury rate is the primary measure that should be used to justify *ongoing* operation in BC of a Young Worker Safety Certificate program.**

  Other strategic initiatives have contributed to a 35% drop in young worker injuries since 1995 (from 4.6% to 3.2% in 2002). The Working Group's foremost success indicator for a Young Worker Safety Certificate program is a link between the certificate program and a further (and sustained) reduction in the overall young worker injury rate. (NOTE: All breakout groups identified this criterion as essential in tracking program results.)

- **Strong demand for (and high satisfaction with) the certificate program from its main consumers – industry/employers and young workers – is of equally high importance as a success measure.**

  Factors identified as generating demand (and therefore needing to be tracked) include:
  - Employers seeing the certificate as an enhancement to young worker employability and value to the business
  - Employers being able to see visible differences (behavioural and attitudinal) between certificate holders and non-certificate holders (such differences might include improved productivity due to fewer injuries and lost time)
  - Employers and industry associations viewing the program as relevant to their industry, relevance also implying a regularly updated curriculum to reflect emerging needs in the workplace
  - Young worker desire for the program based on its valuation by employers/industry.

- A pre- and post-program evaluation protocol should be established by third-party academic or other professional researchers. Evaluation costs for implementing this protocol (as well as for its development) could be covered by the WCB through its Research Secretariat, if research grants are successful.

- Appropriate evaluation measures should be established by professional researchers but minimally, to satisfy stakeholders' information needs, the following steps should be taken to measure market demand and customer satisfaction:
  - Track the number of youth taking program – by age, region, and industry sector.
  - Determine the participation rate as a percentage of youth/students in BC.
  - Survey youth and employers to determine satisfaction with the program.
  - Track the expansion and evolution of the program: variety of delivery channels, number of sites at which it is available, number of instructors, number of employers involved, etc.

- **Other success indicators**
  Other success indicators proposed by at least one of the breakout groups during the Working Group's first meeting are:
  - Stakeholders are providing financial support.
  - The program is being delivered in a consistent, high-quality manner.
  - The program is available on a province-wide basis.
  - A cost/benefit analysis is demonstrating that the costs to develop, deliver and evaluate the program are less than the cost savings from reducing claims cost and other care costs for youth who are injured on the job.

NOTE:

- Working Group members suggest the following considerations when evaluation surveys are designed:

  In employer surveys:
  - Determine overall perceptions of program.
  - Seek comparative assessment of lost time/costs incurred with workers who hold certificates vs. those who don't. *(if not tracked through WCB claims administration)*
  - Investigate whether health and safety training practices are changing within industry sectors as a result of the program.
    - Has health and safety awareness improved amongst supervisors and management?
    - Has morale improved among young workers?
    - Are certificate holders actually applying their course training in the workplace?
    - Is there an increasing number of employers who are changing their hiring practices and processes in some way, e.g., by requiring that young workers have a certificate, by giving them preferential hiring, or by hiring them at a higher wage?

  In young worker surveys:
  - Determine whether they are applying what they learned on the job.
  - Investigate whether the program has improved worker morale.

  In random surveys of youth:
  - Determine if the number of youth reporting that they have received safety training is increasing.

EMERGENT MODEL SUMMARY

The program model that is emerging for British Columbia combines the best features of:

- the Australia model: 7/24 access to learning materials
- the Service!Plus model in BC: highly interactive, skill-building workshops
- the Job Safe model in Alberta: strong funding base from employer involvement
- the Food Safe model in BC: industry-driven standards and curriculum, strong marketing of the program by industry, and certification linked in practice to hiring preferences\
- the Canadian Passport to Safety program: economy of scale in on-line assessment system and certification registry; national standards to ensure portability of credentials
- BC's Graduated Licensing Program: program success measured against injury trends and claims costs.

The proposed program model for BC is a voluntary one. Youth will have the opportunity to take the YWSC courses in a variety of settings. Some secondary schools may offer the program. Employers may also offer the program (providing it in-house or paying for their young workers to complete it elsewhere). And the program will be available in other community settings. The YWSC program will be managed by a stakeholder organization that operates at arm's length to the Workers' Compensation Board of BC. All instructors will be required to complete a Train-the-Trainer orientation and to meet specified trainer standards.

The program will be promoted to, and instructional delivery will be geared to, 15-24 year-olds; however, any new worker will be eligible to register. The program aim is the effective acquisition of safe work practices. This means translating awareness of workplace hazards not only into positive attitudes about safe practices, but also constructive changes in the day-to-day behaviour of youth on the job.

The curriculum will include core competencies applicable in all industry settings – as well as elective modules on industry-specific hazards and how to deal with them.

In British Columbia, the assessment that a young person must complete to quality for a Young Worker Safety Certificate will be competency-based, so will test more than awareness of potential hazards. The assessment will cover both core competencies and industry-specific competencies.

The safety certificate will not be "for life" but rather will be renewable. The definition of new worker – for the purpose of considering whether that new worker is safety-certified – will also be industry-specific.

Province-wide access to a certificate program has been a constant theme throughout stakeholder consultations, focus group research, the inaugural meeting of the Young Worker Steering Committee, and now the Working Group. Stakeholders link accessibility with inclusiveness, and are aiming for a program that reaches and engages not only secondary school students but also early school leavers, new immigrants, people with English as a second language, and people from a variety of cultural backgrounds.

Participant incentives will include qualification for work experience placements and credits towards secondary school graduation – and may include as well a wage incentive and/or preferential status (as a safety certificate holder) in hiring processes.

Program success will be measured against market demand for the program, and employer and youth satisfaction with the program – and also, most significantly, against trends in young worker injuries.

FEASIBILITY & IMPLEMENTATION ISSUES

In the discussion of the proposed program model for a Young Workers Safety Certificate program in BC, the "NOTES" section references some of the unresolved issues that require further dialogue between stakeholders. Key issues are summarized here. Feedback on these topics from Working Group members and other stakeholders is sought now – and input will be used to focus discussions during the June 25, 2003 meeting of the Working Group.

OUTCOME TRACKING

- Is it possible to establish an objective, quantifiable correlation between the certificate program and reduced injury rates? I.e., if YW injury rates do in fact, decline, is that necessarily a direct correlation to the program? What if overall rates don't decline – does that mean the program is a failure? Or might there be other factors contributing to the injury rate? How can all the contributing factors be reasonably accounted for?
- What measure(s) are reasonable and justifiable to use – the overall YW injury rate? Nature/severity of injury? Claims costs? Lost time?
- If a reduction in the YW injury rate is the desired criterion, what is a reasonable, justifiable target? What factors go into determining the target?
- How can changes in behaviour and attitudes be effectively and efficiently tracked?
- If follow-up is desired to track injury rates of certificate holders vs. non-certificate holders as a means to quantify success, this may require significant investment of money.

  NOTE: The Job Safety Skills Society in Alberta estimated such research would cost between $250,000 and $350,000. The periodic review could be much less if the technology and information mgmt. infrastructure is appropriately set up at the outset of the program, but those infrastructure changes will still require a budget.

  Who should do this outcome tracking, and how will research costs be funded?

N.B. UBC Assistant Professor Mieke Koehoorn from the Centre for Health Services & Policy Research (Dept. of Health Care & Epidemiology) has developed a research proposal to address some of these concerns. Her proposal has been submitted to the WCB Research Secretariat for funding. The Steering Committee and Working Group should learn by late summer 2003 whether funding for that research project has been approved.

PARTICIPATION TARGETS

- What is a reasonable youth participation rate? based on what criteria?
- What is an acceptable operating definition for "employer buy-in"? How can it be quantified?

LEGISLATIVE SUPPORT

- Will the YWSC program require legislative "teeth" to succeed, i.e., to involve large numbers of youth and to ensure benefits for safety certificate holders? If so, what kind of statutory regulation?

PARTICIPATION INCENTIVES

- What will employers need to *offer* safety certificate-holders (as a tangible benefit of completing the program) for a large number of youth to be motivated to complete the training and test?
- What will employers need to *receive* (as return on their investment) for many to be motivated to finance this program for young workers?
- What will program providers (the instructors, assessors, program administrators) need to gain for them to consider it a worthwhile and cost-effective program to administer?

FEASIBILITY & IMPLEMENTATION ISSUES (cont'd)

NATURE OF ASSESSMENT

- Given reservations about the reliability and validity of unsupervised on-line tests, what type of assessment (without being unreasonably expensive to administer) will give employers confidence that certificate-holders have acquired critical skills?

ACCESSIBILITY – NEED FOR MULTIPLE DELIVERY AVENUES

- If province-wide accessibility means an on-line option, does that compromise the goal of a program that effects behavioural change? Can an on-line program be sufficiently interactive to effect behavioural change?
- Does an on-line component adequately address the issue of accessibility, since it is contingent on access to a computer?
- What take-up might be expected on an on-line program, given stakeholder preference for classroom training (as suggested by focus groups conducted in 2001)?
- Does accessibility to the program also infer accessibility to the certificate (i.e., a passing grade that is attainable for most of the target audience)?
- Of the two aims – accessibility and credibility of the program – which is most important?
- Should supervised examinations be a requirement of an on-line course?
- What passing grade is acceptable, bearing in mind the perhaps conflicting goals of credibility and accessibility?

FINANCING PLAN

- Who (if anybody) should be eligible to take the YWSC program for free?
- Who (if anybody) should be eligible to take the YWSC program at a discounted price?
- What benefit will come to the employers and/or industry associations who fund the YWSC program – i.e., payback as investors in the program (vs. employers who don't support the program)?
- What are the comparative delivery costs of an on-line versus a classroom program? or a combination of the two?
- What are the cost implications of a program based on achieving behaviourial change (vs. a program based on achieving awareness)?

PROGRAM FUNDING COMPARISONS

PROGRAM	Annual Operating COST	Delivery Approach	Training TIME	Program REACH: Participant #	Per-Participant Operating Cost	Program FUNDERS
ALL-INDUSTRY CERTIFICATE PROGRAMS						
Alberta Job Safe	$250,000	Schools (secondary and post-secondary)	75 hrs	40,000 annually	$6.25 (excluding instructor costs)	Corporate sponsors (6 major)
Australia Work Safe	$21,000	Internet-based	Self-paced	12,000 annually	$1.75 (self-directed study)	Government (100%)
NWT Workplace Safety & The YW	$125,000 development costs since Yr. 2000 + part-time coordinator	Classroom-based (Gr. 10); with self-study program available on CD	25 hrs.	200 annually (based on 100 schools, 3 colleges, some employers)	? (50% of students use self-study option)	WCB of NWT
New Brunswick Safety Start	$120,000 minimum	Classroom-based (40 secondary schools)	8 hrs.	3,000 last year (after 2 years)	$70	Currently 100% govt. but funding temporary
INDUSTRY-SPECIFIC PROGRAMS						
Construction Safety		CD-ROM based	~4 hrs.	~17,000 annually (based on 7-yr. total; mandatory for last 4 yrs.)		Private corporation (who then licenses the program to colleges and other training providers)
Faller Safety		Classroom-based with videos; then structured on-site training with experienced coach		starting in 2003		Cost-sharing negotiations underway between industry association, union & WCB
Food Safe		Classroom-based (secondary and post-secondary); option of correspondence course	8 hrs.	~20,000 annually (based on 17-yr total; legislative rqmt. since Yr. 2000)	$55 classroom option $75 by correspondence $95 Level 2 course	Cost-recovery model (development costs paid by Ministry of Advanced Ed and Human Resource Development Canada)
Transportation of Dangerous Goods		Classroom-based (BC Safety Council)	4 hrs.	2,500 annually (in BC)		Employers regulated by Transport Canada
Traffic Control	$190,000 dev. costs; $130,000 annual operating costs	Classroom-based	16 hrs.	6,000 (by 2004 – based on pool of 400 instructors)		WCB of BC
Service!Plus	$150,000 dev. costs Now operating on cost-recovery-plus basis	Interactive workshops	4-5 hrs	25,000 annually		Division of Propane Training Institute: cost-recovery-plus
OTHER PROGRAMS						
Passport to Safety		Internet-based testing & registration system	N/A	200,000 = annual *target*		Fees from participating employers
Graduated Licensing	Large part of $95 million annual operating budget for driver licensing operations in BC (including test centres)	Self-study and coaching manuals; optional courses; supervised practice		60-80,000 annually	? NOTE: Claims savings cover operating costs	Cost-recovery model based on claims savings
DARE	More than $1 million	Classroom-based – with 50,000 police instructors	10 hrs. minimum	26 million in the U.S.		Corporate sponsors

TARGET REACH for YWSC Program in British Columbia

This section provides background information on the size of the target audience – and invites reviewers to set a measurable target for engaging that audience in the YWSC program.

- Even with relevant content, a highly appealing delivery approach, and compelling incentives to participate, it will take years to build interest and a high level of participation in a Young Worker Safety Certificate program. For example, in Alberta, even with 550 high schools actively involved in delivering the program and after six years of operation with significant funding from corporate sponsors, Job Safe is registering only one out of every sixteen secondary school students in the province (40,000 students annually).

- In 2004, the target year for piloting a Young Worker Safety Certificate program in British Columbia (subject to stakeholder agreement on an appropriate model and positive feasibility assessment), there will be, on average, 50,000 students in each of Grades 10, 11, 12 in British Columbia.
(NOTE: 265,000 is the current total number of students in Grades 8, 9, 10, 11 and 12 in British Columbia.)

- The Government of British Columbia web site notes that:
40% of full-time students aged 15-19 participate in the labour force during the school year.
50% of full-time students aged 20-24 participate in the labour force during the school year.
Presumably, even more students enter the labour force during the summer period.

- If the YWSC program focused on students who have already begun to work part-time and if it engaged even 10% of these students while they are in Grade 11 or Grade 12, that would mean reaching (say, by Year 2) 1:20 of the **Grade 11-12 student population**: 5,000 participants per year.

- Each year in British Columbia, approximately 5,000 **other young people** enter the BC labour force – as **recent graduates of secondary or post-secondary education programs or as school dropouts**. So in the same year that 5,000 Grade 11-12 students might be completing the YWSC, there could be 250 other program participants (based again on a 1:20 success rate in reaching this part of the target audience of young workers). These young people could be completing the Young Worker Safety Certificate through on-line studies, community workshops or workplace-based delivery of the program.

- Additionally, between 5,500 and 6,000 individuals register as **new apprentices** each year. Assuming a 1:10 success rate in engaging this segment of the target audience, 600 new apprentices might also complete the Young Worker Safety Certificate program each year.

- For planning purposes, the 1:20 success rate with secondary school students and out-of-school youth (and 1:10 rate for new apprentices) in reaching the target audience would then mean an annual "reach" of close to 6,000 youth.

  NOTE: It is assumed that *all* members of the target audience might well be exposed to information about the Young Worker Safety Certificate program. However, a conservative participation rate is assumed, at least initially, for the purposes of doing a cost-to-benefit analysis because of the hurdles already noted by young people who have been consulted about the program.

Feedback Request

(Please enter your response on the feedback form included with Guidelines To Reviewers)

A reasonable objective for a Young Worker Safety Certificate program to reach within two-three years of its design, development and pilot run is: **to register _____ young participants every year and to do so with program fees (course and test combined) being no higher than $_____.**

DRAFT BUSINESS CASE for a YWSC Program

NOTE

This initial cost:benefit analysis has been drafted (and only partially at this stage) by the project consultant as a first step in considering the fiscal feasibility of a Young Worker Safety Certificate program in BC. Readers of this discussion paper are invited to amend or otherwise comment on the business case presented here.

Injury claims cost saving

WCB has reported that a reduction in the young worker injury rate of 3.7% (from 7.3% in 1989 to 3.6% in 2001) resulted in a $24 million savings in claim costs in British Columbia: on average, a savings of $6.5 million for every percentage point drop in the proportion of young workers injured on the job.

- As young workers become more safety conscious and more skilled in avoiding injury, not only the frequency, but also the severity of injuries for young workers, may drop further.
- As healthcare interventions become increasingly sophisticated, it is also possible that the long-term consequences of a workplace injury may be reduced and with such breakthroughs, claims costs also reduced (even without further investment in safety education).
- Even factoring in the possibility of the latter positive trend, it is reasonable to assume that given the large number of youth (276,800) active in BC's labour force, every percentage point by which the young worker injury rate increases represents a significant cost to industry: $4 million or more. Conversely, **every percentage point by which the YW injury rate falls appears to represent claims savings of at least $4 million**.

Injury rate and claims cost savings reliant on many factors

A Young Worker Safety Certificate program is but one of many strategic initiatives designed to lower the frequency and severity of workplace injuries – so this program alone cannot take all credit for reductions in the YW injury rate.

- If claims cost savings are considered against investment in (operating costs of) injury prevention campaigns and programs, **a YWSC program might reasonably be entitled to no more than a 10%? allocation of resources "freed up"as a result of claims cost savings.**
  NOTE: Resources for such a program might be allocated back to industry by WCB as a percentage of employer assessments collected. Or industry could take the initiative and fund the program, then recover their investment over time through a reduction intheir assessments, as the worker injury rate drops in those industry sectors that are participating in the young worker safety certificate initiative.
- **Using the 10% investment assumption** (i.e., $400,000 of the estimated $4-6 million claims cost saving if a YWSC program reduced the annual injury rate of young workers by one percent)**, then a YWSC program that could operate efficiently and effectively on a budget of, say, $200,000 per year would be earning a 2:1 return on investment for employers / industry.**

Additional benefits to industry – besides reduction in injury claims costs and related employer assessments payable to WCB – are likely to be:

- **no loss of productivity due to worker injuries**
  NOTE: WCB has reported that the 3.7% drop in YW injury rate between 1989 and 2001 meant an "earning" of 200,600 productive workdays: on average, 54,000 more days of productivity for each decline of one percent in the YW injury rate.
- **no requirement to replace an injured young worker on either a temporary or permanent basis** – thereby saving additional recruitment, screening, orientation and training costs.

An immeasurable benefit to communities would be less grief for injured young workers and their family and friends. Another tangible community benefit would be reduced pressure on the healthcare system. And the long-term legacy of a successful YWSC program would be safer workplaces for everybody as young workers mature, influence their co-workers and also move into supervisory roles, using their own safety awareness and skills to influence workplace practices and improve workplace conditions.

FINANCING CONSIDERATIONS – COST ITEMS

START-UP COSTS

- **Business Plan & Budget Development for Program Providers**
- **Detailed Curriculum Planning & Instructional Design**
- **Curriculum Development** (review / adaptation of existing materials; writing; editing; development of practice assignments, self-assessment and coaching guides, etc.)
- **Adaptation of Content for On-line Delivery**
- **Production of Video and/or Other Learning Resources**
- **Design of Competency Assessment**
- **Development of Registration & Certification Procedures, Standards and Forms**
- **Information Management System** (data architecture and creation or enhancement of electronic tracking system for program registrations, competency assessment results and certificate-holders)
- **Development of Train-The-Trainer Program**
- **Recruitment & Orientation of Instructors**
- **Design of Promotional Campaigns & Materials**
- **Production of Promotional Materials**
- **Preliminary Research for Evaluation Protocol**

ONGOING OPERATING COSTS

- **Program Promotion** (including outreach to parents, students, other youth, employers including both large corporations and small businesses, educators, employment services and community agencies)
- **Instructional Delivery**
- **Administration & Scoring of Competency Assessments**
- **Registration, Certification & Overall Program Administration**
- **Outcome Evaluation Research**
- **Continuous Enhancement of Curriculum & Instructional Design**

FINANCING – BREAK-EVEN ANALYSIS

NOTE: What follows is not an exhaustive break-even analysis for the proposed Young Worker Safety Certificate program in British Columbia. Completing this analysis is contingent on further input from stakeholders about acceptable price limits and price discounts, and also on input regarding what assumptions are reasonable about participation numbers.

B/E Analysis WITHOUT Corporate Sponsorship, Government Grants or WCB Funding

- Coupled with a program fee of, say, $35 per participant, a planning assumption of 6000 participants annually (by year 2) suggests that annual program expenses at that stage should be no more than $210,000 – or that any expenditures beyond this limit would be a subsidy from employers / industry.

- Assuming somewhat higher operating costs (say, annual operating budget of $300,000) but also substituting a maximum program fee of $50 per participant would mean that the program could still break even if it attracted 6000 youth per year.

- The experience of other jurisdictions in which similar initiatives are operating suggests that operating costs will be in the range of $150,000 to $250,000 minimum. *(See section titled Program Funding Comparisons for identification of expenditures by others to develop and deliver their programs.)*

- Given a maximum price of $50 per participant, and also given the planning assumption of an annual operating budget of $150,000 to $250,000, the break-even point (non-subsidized model) will be an annual registration of 3,000 to 5,000 youth.

- Given a considerably lower program fee, say, $25 maximum, and operating costs in the same range ($150,000 to $250,000), the break-even point will be annual registration of 6,000 to 10,000 youth.

OTHER CONSIDERATIONS IN BREAK-EVEN CALCULATIONS

- Introducing a sliding scale pricing model – with very low-income youth, for example, eligible to take the certificate program at no charge to them AND/OR with discounted fees for youth who complete the program in secondary school OR with other pricing accommodations – will mean that a higher volume of participants is needed to cover anticipated operating expenses.

- Alternatively, introducing a sliding scale pricing model (or free access to the program for some youth) may mean a program fee higher than $50 is needed with some segments of the youth market.

- Program sponsorship from individual corporations and/or industry associations could enable lower program fees for youth participants. However, relying on corporate sponsorships to subsidize program fees will also mean higher administrative requirements (and ongoing operating costs) to secure (and sustain) those sponsorships.

Background Information on New Safety Certificate Program Proposed for Young Workers

Between 1989 and 2002, the young worker injury rate has been reduced by more than 50% in British Columbia – but the rate is still too high. Every day, 41 young workers are injured. Every year, five young workers in BC die.

Reducing young worker injuries requires (1) *Awareness*, (2) *Education* and (3) *Enforcement*. One proposed new education initiative is a Young Worker Safety Certificate program targeted to all 15-24 year olds: secondary and post-secondary school students, school dropouts, and youth already in the workplace (working either part-time or full-time).

The Workers Compensation Board of British Columbia has researched similar programs in other provinces and other countries (Executive Summary - Environmental Scan PDF 106 KB). Focus groups with injured young workers, other youth, parents, educators and industry reps in BC have indicated strong support for a certificate program and have also helped to identify what type of program might work (Summary - Research Findings on Certificate Program PDF 126 KB).

In January 2003, a Steering Committee was established to oversee the design of a safety certificate program for young workers in BC. In March 2003, a YWSC Working Group (involving representatives of 55 stakeholder groups) was formed to consider various program models, assess program feasibility, and to develop a set of recommendations for the Steering Committee about the best approach to use in this province (Working Group and Steering Committee: Members PDF 53 KB; Terms of Reference 93 KB).

Young Worker Safety Certificate Program Options Paper (PDF 279 KB)

A draft program model for the Young Worker Safety Certificate is emerging from initial discussions amongst Working Group members and from other research.

The proposed certificate program would build on the Student WorkSafe K-9 curriculum, would add industry-specific modules and some new core content to the current Student WorkSafe 10-12 curriculum, and would include a standardized competency assessment for all learners. The delivery model would include but would also reach beyond secondary schools.

The first stage of the consultation process is now complete. Review the feedback (PDF 308 KB) received on the draft program model.